REMARKS

Applicants amend independent claims 1 and 9, and claims 1-15 are pending in this application. Applicants respectfully request allowance of all the pending claims.

The Examiner rejects claims 1-4, 6, and 8-10, 12, 14, and 15 under 35 U.S.C. §103(a) as being unpatentable over United States Patent No. 5,857,538 ("Chambers") in view of United States Patent No. 5,908,078 ("Creixell"). The Examiner rejects claims 5 and 11 under 35 U.S.C. §103(a) as being unpatentable over Chambers as modified by Creixell and in further view of United States Patent No. 4,828,069 ("Hatsuyama"), and the Examiner rejects claims 7 and 13 under 35 U.S.C. §103(a) as being unpatentable over Chambers as modified by Creixell and in further view of French Patent No. 1020216 ("Bernard").

Chambers discloses a motorcycle (10) having an engine operably coupled to the rear wheel (58) by a chain (11). In Figs. 9 and 10, the motorcycle includes a biased tensioner (not identified) that contacts the lower extent of the chain (11).

Creixell discloses a suspension/transmission mechanism for a motorcycle. As illustrated in Fig. 6, the motorcycle includes a swing arm (1) pivotally connected to a frame at one end (9) and a rear wheel (2) rotatably coupled to the other end (8) of the swing arm (1). The motorcycle also includes a drive sprocket (20) rotated by the engine and a driven sprocket (21) coupled for rotation with the rear wheel (2). The drive sprocket (20) is connected to the driven sprocket (21) by a chain (22).

The suspension mechanism of Fig. 6 includes a first transfer pinion (23) fixed to the frame (25) in contact with the upper extent of the chain (22) and a second transfer pinion (26) fixed to the frame (25) and in contact with the lower extent of the chain (22). The first and second transfer pinions (23, 26) cooperate to maintain the rearward portions of the lower and upper extents (i.e., input and output branches 28, 29) substantially parallel to the swing arm (1) to reduce the effect the chain tension has on the relative angular position of the swingarm (1). In other words, the first and second pinions (23, 26) reduce the reaction forces of the chain and the drive wheel on the swingarm (1). Without the pinions (23, 26), these reaction forces would otherwise cause considerable instabilities in the motorcycle by lifting or sinking the swingarm during acceleration and deceleration.

The Examiner concedes that Chambers does not teach or suggest a tensioner that is fixed to the frame or the engine/transmission assembly against both pivotal and translational

movement with respect to the output shaft. However, the Examiner argues that it would have been obvious to one of ordinary skill in the art at the time the invention was made to have replaced the biased tensioner of Chambers with a fixed tensioner such as the second transfer pinion (26) disclosed in Creixell.

Applicants respectfully disagree with the Examiner and submit that the fixed tensioner (26) of Creixell cannot be directly substituted for the biased tensioner of Chambers because the fixed tensioner (26) would not work for its intended purpose in the Examiner's proposed combination. Creixell discloses a fixed tensioner (26) that is used in combination with a second fixed tensioner (23) to reduce acceleration and deceleration effects on the swingarm (1). The tensioner (26), acting alone as proposed by the Examiner, would no longer control these effects on the swingarm (1). Rather, in order to maintain the functionality of the pinion (26) in the proposed combination, the biased tensioner of Chambers would have to be replaced by the *both* the first pinion (26) contacting the lower extent of the chain and the second pinion (26) contacting the upper extent of the chain. Even if the Chambers and Creixell were combined in this manner, the combination fails to teach or suggest all of the limitations of the claims, as will be discussed in more detail below.

Claim 1 recites a motorcycle including a frame and an engine/transmission assembly mounted to said frame and having an output shaft rotating in response to the operation of the engine/transmission assembly. A drive sprocket is mounted to the output shaft for rotation with the output shaft. A swingarm is pivotably mounted to the frame or the engine/transmission assembly for pivotal movement within a range of motion. A rear wheel is mounted to the swingarm for rotation and a wheel sprocket is mounted to the rear wheel for rotation with the rear wheel. A flexible drive member couples the drive sprocket and the wheel sprocket such that the rear wheel is caused to rotate in response to the operation of the engine/transmission assembly. The flexible drive member includes an upper extent linearly extending between the upper portions of the drive sprocket and the wheel sprocket, and a lower extent extending between the lower portions of the drive sprocket and the wheel sprocket. A tensioner is fixed to the frame or the engine/transmission assembly against both pivotal and translational movement with respect to the output shaft. The tensioner maintains contact with a side of the lower extent and applies a force to the side of the lower extent as the swingarm pivots through the range of motion. The drive sprocket, the wheel sprocket, and the tensioner are sized and positioned such

that a belt path length defined by the drive sprocket, the rear sprocket, and the tensioner remains substantially constant as the swingarm pivots through the range of motion.

Claim 9 recites a method for tensioning a motorcycle flexible drive member. The method includes providing a motorcycle frame and a swingarm and mounting an engine/transmission assembly to the motorcycle frame. The engine/transmission assembly includes an output shaft rotating about an axis of rotation in response to operation of the engine/transmission assembly. The method also includes mounting a drive sprocket to the output shaft for rotation therewith, mounting a rear wheel to the swingarm for rotation with respect to the swingarm, mounting a wheel sprocket to the rear wheel for rotation therewith, pivotably interconnecting the swingarm with at least one of the frame and engine/transmission assembly to permit pivotable movement of the swingarm in a range of motion about a pivot axis that is non-collinear with the axis of rotation of the output shaft, and coupling the drive sprocket and the wheel sprocket with a flexible drive member such that the rear wheel rotates in response to rotation of the output shaft and such that an upper extent of the flexible drive member linearly extends between the upper portions of the drive sprocket and the wheel sprocket. The method further includes mounting a tensioner to at least one of the engine/transmission assembly and frame such that the tensioner contacts a side of a lower extent and applies a force to the side of the lower extent, fixing the tensioner against translational and pivotable movement with respect to the engine/transmission assembly and frame, pivoting the swingarm through the range of motion while maintaining a substantially constant belt path length defined by the drive sprocket, the wheel sprocket, and the tensioner, and maintaining contact between the side of the lower extent and the tensioner such that the tensioner applies a force to the side of the lower extent as the swingarm pivots through the range of motion.

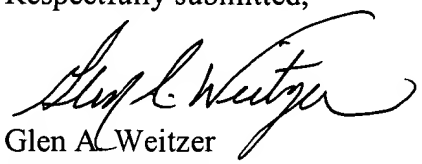
Claim 1 recites, among other things, a flexible drive member including an upper extent linearly extending between the upper portions of the drive sprocket and the wheel sprocket. Claim 9 recites, among other things, coupling the drive sprocket and the wheel sprocket with a flexible drive member such that an upper extent of the flexible drive member linearly extends between the upper portions of the drive sprocket and the wheel sprocket. Claims 1 and 9 each recite an upper extent of a flexible drive member linearly extending between upper portions of a drive sprocket and a wheel sprocket. Because claims 1 and 9 recite this similar limitation, independent claims 1 and 9 will be discussed together with respect to the rejections.

Even if Chambers and Creixell were combined to maintain functionality in the acceptable manner described above (i.e., by replacing the biased tensioner of Chambers with the first and second fixed pinions (23, 26) of Creixell), the combination fails to teach or suggest an upper extent of a flexible drive member linearly extending between upper portions of a drive sprocket and a wheel sprocket. Instead, the proposed combination would include a pinion (23) in contact with the upper extent of the chain between the upper portions of the drive sprocket and wheel sprocket such that the upper extent of the chain does not extend linearly between the sprockets. The pinion defines a midpoint between the non-linearly aligned forward and rearward portions of the chain. With reference to Fig. 6 of Creixell, the forward portion of the chain (22) inclines from the drive sprocket (20) to the pinion (23) and the rearward portion declines from the pinion (23) to the wheel sprocket (21).

Therefore, Applicants respectfully submit that Chambers and Creixell, alone or in combination, do not teach or suggest the subject matter defined by independent claims 1 and 9. Accordingly, independent claims 1 and 9 are allowable. Claims 2-8 depend from allowable independent claim 1 and claims 10-15 depend from allowable independent claim 9. The dependent claims are allowable for the same reasons as the independent claims and for other reasons.

The Examiner is invited to contact the undersigned attorney should the Examiner determine that such action would facilitate the prosecution and allowance of the present application.

Respectfully submitted,



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